INFORMATION AND PREVENTION GUIDELINES FOR CHILD CARE CENTERS AND SCHOOLS

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PREVENTING COMMUNICABLE DISEASES IN THE DAY CARE/SCHOOL SETTING

Controlling communicable diseases in day care and school settings is of utmost importance. Providing a safe, comfortable, and healthy environment facilitates the educational process, encourages social development, and allows children to acquire healthy attitudes toward organized settings.

However, children who are ill or feel unwell can create difficulties in group settings. An ill child often demands more attention from the teacher or caregiver and cannot fully participate in group or educational activities. Worse yet, the child with a communicable disease may spread the illness to others. Accordingly, it is essential that educators and day care providers control the spread of communicable diseases by safe, effective, and practical efforts.

The purpose of this booklet is to provide an accessible reference of concise information on common childhood communicable diseases. Each disease is described in detail, including signs and symptoms, methods of transmission, prevention practices and exclusion policies for children from the school or day care setting. Tips on the prevention and control of communicable diseases have been included, as well as information on hand washing, playground safety, and general sanitation guidelines.

Concerned parents often request communicable disease information from educators and caregivers. Pages of this booklet may be photocopied and distributed to parents and others in order to provide accurate information on communicable diseases and measures to prevent their spread.

A directory of local health departments has been listed for your convenience. Your local health department can provide a wealth of information and services to your facility, including assistance in the control of a communicable disease outbreak. In addition, day care providers should report those diseases reportable by law to their local health departments, as well as any other increased number of illnesses. This helps to prevent the spread of disease and to keep accurate records of communicable disease in your community and our state.

Information can also be found on the Utah Department of Health, Office of Epidemiology's website at www.health.utah.gov

It is hoped that this guide will be used as a reference in order to help keep our children, Utah's children, healthy.

HELPFUL TIPS:

Hand washing is the single most important way to prevent the spread of communicable diseases. Use soap, warm water and disposable paper towels. Wash your hands frequently and teach children to wash their hands, too. Hand washing reduces the number of microorganisms on hands that can spread communicable diseases.

Open the window to let the fresh air in! Well-ventilated rooms help reduce the numbers of airborne germs inside. Airing out the rooms is important, even in the winter. When it's cold outside, we spend the majority of time inside. Respiratory diseases easily spread from coughs and sneezes. Opening the window at least once a day lets the germs out and fresh air in.

Follow a good housekeeping schedule and disinfect in the proper way. Make sure that the floors, walls and bathrooms are clean! Clean and disinfect toys at least weekly. Disinfect the food preparation surfaces, eating surfaces and diapering tables. The simplest way to disinfect a surface includes three steps. The first step is to clean the surface with soap and thoroughly rinse with clean water. The second step is to spray or wipe the surface with a solution of 1/4 cup of household bleach in one gallon of water. The final step is to let the surface air dry in order to give the disinfectant time to work. Be careful not to use this solution on surfaces that could be damaged, such as carpets. This preparation is inexpensive and kills bacteria, viruses and most parasites. If you prefer to use a commercial disinfectant, you may. It is important, however, to measure the amount of disinfectant according to the directions on the bottle to get the necessary concentration needed to disinfect.

Require that children are up to date on immunizations. An immunization schedule is in the back of this booklet. Check immunization records and update them regularly. Do your part to help eliminate vaccine-preventable diseases. Remember, "An ounce of prevention is worth a pound of cure."

Do not share personal items among children and keep their belongings separate. Do not allow children to share belongings such as hair brushes, food, clothing, hats, pacifiers or other items. Separate children's coats, hats, and bedding items.

Separate children by using space wisely. Maintain distance between sleeping areas, mats, cribs or cots. Keep children in groups and consistently assign caregivers to the same group. Keep diapered and toilet-trained children separate to prevent spread of diarrheal diseases.

Exclude sick children and staff. The Exclusion Policies as outlined in the Child Day Care Rules have been included. Sending a sick child home with his/her parent helps to prevent the other children from becoming ill with a communicable disease.

Dear Parent:
On, a child in our class became ill with the communicable lisease listed on the attached sheet.
Because your child might have been exposed to this illness, it is necessary for you to watch your child for the signs and symptoms listed on the attached fact sheet. If your child becomes ill, brompt medical attention or treatment may help resolve the infection. It may be necessary to seep him/her at home until the symptoms resolve or until your child receives treatment. The fact sheet explains more about the signs, symptoms, and other concerns.
By notifying you of this possible exposure, we are providing the best possible care for your child. In any setting, it is common for some children to become ill with childhood diseases. At times, they are not preventable. When we notify you of an illness, we are trying to control the spread and prevent new cases of illness. We try to keep our children healthy and happy.
f you have any questions about signs or symptoms of this illness, please contact a staff nember, the local health department or the Utah Department of Health, Office of Epidemiology at (801) 538-6191.
Sincerely,
Teacher
Date

CHICKENPOX*

(varicella - zoster virus)

Incubation, Signs and Symptoms

Incubation Period: 2-3 weeks, usually 13-17 days.

Signs and Symptoms: Skin rash often consisting of small blisters all over the body, which leave scabs. Eruption comes in crops. There may be pimples, blisters and scabs all present at the same time. Mild fever. Sometimes this infection is mild and only a few blisters are present.

Methods of Transmission

Chickenpox is spread by direct contact, droplet or airborne spread of secretions from the respiratory tract of an infected person. Also, indirectly by contact with articles freshly soiled with the discharges from blisters or vesicles of an infected person.

Minimum Control Measures

Communicable Period: As long as 5 days but normally 1-2 days before blisters appear, and until all blisters are crusted and scabbed, or until 5 days after the appearance of the blisters. Contagiousness can be longer in a person with altered immunity.

Control: EXCLUDE infected children from school and childcare until all of the blisters are crusted and scabbed. EXCLUDE susceptible contacts (i.e. those children who have not had chickenpox disease or the vaccination) from day 10 through day 21 following exposure to a case of chickenpox within the same kindergarten class or grade level.

Vaccine-Preventable: Chickenpox vaccine is recommended at 12-18 months of age and **is required for kindergarten school entry.** It is recommended that children younger than thirteen years of age, without disease history, should receive one dose of vaccine. Adolescents and adults without disease history should receive two doses of vaccine four to six weeks apart.

Other Information

Notify parents if you suspect their child has been exposed to chickenpox. Children should not be given aspirin or salicylate-containing compounds because the administration of these products increases the risks of Reye syndrome. Acetaminophen may be used for fever control. Early signs and symptoms include a skin rash, vomiting, and confusion. Medical care should be sought immediately if Reye syndrome is suspected.

Chickenpox is generally a more severe disease in adults. Also, children with certain chronic diseases, such as leukemia or Acquired Immunodeficiency Syndrome (AIDS), are at extremely high risk for complications. Pregnant women who have not had chickenpox are not immune and should avoid exposure because illness could harm the fetus. A susceptible pregnant woman who has had exposure should consult with her physician immediately.

Shingles or zoster infections are not caused from exposure to chickenpox, but caused by reactivation of the virus in the body. Therefore, adults are not at risk for shingles when exposed to a person with chickenpox. *Chickenpox is reportable. The patient's demographics, vaccination status, and clinical information should be reported to the local health department.

COLDS

Incubation, Signs and Symptoms

Incubation Period: 12-72 hours, usually 48 hours; certain viruses up to 7 days.

Signs and Symptoms: Irritated throat, watery discharge from nose and eyes, sneezing, chills, and general body discomfort.

Methods of Transmission

Varies--includes airborne and direct contact with an infected person. Also by contact with articles soiled by discharges from the nose or throat of an infected person.

Minimum Control Measures

Communicable Period: Varies depending on virus. The exact period is unknown, but thought to be at least 24 hours before onset of symptoms until 5 days after onset.

Control: EXCLUDE the child who feels very unwell or has a fever. Otherwise, exclusion is not generally practical.

Other Information

Children and adults should wash hands after touching nasal discharge, such as after wiping a nose. Tissues should be disposable, used only once, and thrown away.

Children should be taught to turn and cough into their shoulders if they cannot cover their mouths and noses with a tissue.

Prevention practices include: 1) good handwashing practices with warm running water, soap, and disposable paper towels for both children and staff; 2) proper cleaning and disinfection of both the environment and toys; 3) proper ventilation or airing out the room each day, including during cold weather; and 4) proper spacing of cots or sleeping mats so children will not be crowded together.

CROUP

Incubation, Signs and Symptoms

Incubation Period: parainfluenza virus infections: 2-6 days; adenovirus infections: 2-14 days.

Signs and Symptoms: Fever, wheezing, difficult breathing, and agitation. Croup is often accompanied by cold-like symptoms, irritated throat, discharge from nose and eyes, sneezing, chills and general body discomfort.

Methods of Transmission

Contact with respiratory secretions or airborne droplets from an infected person. Indirectly by articles soiled with discharges of the nose and throat from an infected person. Usually caused by same group of viruses that cause colds.

Minimum Control Measures

Communicable Period: Varies depending on virus, the exact period unknown. Thought to be at least 24 hours before the onset of symptoms and last until 5 days after onset of symptoms.

Control: EXCLUDE the child with fever and/or difficult breathing. A child should be excluded any time the illness prevents the child from participating comfortably in the daily activities or if the child demands more attention than the staff can adequately give.

Other Information

Many times croup syndromes will be better during the day and worse at night. Croup is an immune response of the lower respiratory tract to infection with the same viruses that cause colds. No one understands why some children develop croup and others don't. If children are exposed to a child with croup they will usually develop a cold, rather than croup symptoms.

Cytomegalovirus (CMV)

Incubation, Signs, and Symptoms

Incubation Period: Information about this is not exact. Illness following transfusion with infected blood begins three to eight weeks after the transfusion. Infections acquired during birth may occur three to twelve weeks after delivery. The time frame for onset of symptoms following person to person transmission is unknown, since most people never become ill.

Signs and Symptoms: Most children and adults infected with CMV do not have symptoms. Those who do may have fever, swollen glands, and feel tired. Immunocompromised people (such as AIDS patients or those receiving cancer treatments) may have a more serious illness such as pneumonia or inflammation of the eye. The most severe form of the disease occurs when a mother infects her fetus. Most of these infections are without symptoms, however, about 10% of these babies later have some type of disability such as hearing loss, learning disabilities, or mental retardation.

Methods of Transmission

Communicable Period: Most children who become infected with CMV will shed the virus for many months, with a range of 6 months to two years. Adults shed the virus for a shorter period, probably less than six months. Even if an individual is no longer shedding the virus or the infection is no longer communicable, CMV can remain in the body throughout a person's lifetime.

Control: Children with CMV infection should not be excluded from school. Also no attempts to prevent children from spreading CMV should be made, as many children will be infected with the virus naturally. Routine screening for CMV of staff at childcare centers and schools is not recommended.

There is usually no treatment for CMV. However, patients with AIDS or cancer who have an eye infection may be treated with ganciclovir.

Other Information

Pregnant women should be careful to wash their hands after changing diapers or having contact with urine or saliva. Those working in day care centers should not kiss babies or young children on the mouth. Pregnant women should ask their doctor about CMV infections.

DIARRHEAL DISEASES*

Incubation, Signs and Symptoms

Incubation Period: Varies depending on causative agent.

Signs and Symptoms: An increased number of stools compared with the child's normal pattern with increased water and/or decreased form. May be accompanied by nausea, vomiting, abdominal cramping, headache and/or fever. Note that breastfed babies may normally have unformed stools.

Methods of Transmission

Person-to-person contact, in the majority of cases by fecal-oral route (ingesting very tiny amounts of fecal material from an infected person through contaminated hands or objects). Possibly from improperly refrigerated, reheated, or contaminated foods. Contaminated water and food are not usually the source of diarrhea in day care centers.

Minimum Control Measures

Communicable Period: Varies depending on causative agent. There is increased risk of disease for children in diapers and staff caring for these children.

Control: Always EXCLUDE children and staff with diarrhea. Children and staff should thoroughly wash hands after diaper changes and toilet use. Disposable table liners should be used on the changing table. Disinfect the changing table after each use. Educate staff regarding fecal-oral route of transmission. Caregivers who change diapers must not handle food. Separate diapered children from toilet-trained children.

Other Information

If two or more children or staff members in one classroom experience diarrhea within a 48-hour period, an infectious agent should be suspected. NOTIFY YOUR LOCAL HEALTH DEPARTMENT. Stool testing and treatment may be necessary.

*Any individual case of diarrhea due to bacteria, such as *Salmonella*, *E. coli*, *Shigella* or the protozoan *Giardia*, should be reported to your local health department. Also report any pattern of illness which is unusual or an increased number of illnesses/cases.

Schools or centers with outbreaks of diarrhea should contact their local health departments.

DIPHTHERIA*

Incubation, Signs and Symptoms

Incubation Period: 2-4 days, with a range of one to ten days.

Signs and Symptoms: Gradual onset over 1-2 days. Diphtheria usually occurs as a white or gray patch or patches of membrane surrounding inflammation and soreness in the throat or nose. Glands in the neck are swollen. Low-grade fever often accompanies symptoms.

Diphtheria can occur as a skin, vaginal, eye, or ear infection. However, this occurs very infrequently and is more common in tropical regions, among homeless persons, and those living in crowded conditions. Diphtheria can be life threatening.

Methods of Transmission

Primarily by contact with a person infected with diphtheria. Diphtheria may be transmitted by a symptomatic person or a carrier. Infectious fluids include discharges from the nose, throat, eye or skin lesions. In rare instances, diphtheria can be transmitted by contact with articles soiled by discharges from the lesions of an infected person.

Minimum Control Measures

Communicable Period: Variable, usually 2 weeks or less and seldom for more than 6 weeks. Effective antibiotic therapy and antitoxin is necessary. Patients that have been treated with an effective antibiotic treatment usually are communicable for fewer than 4 days. The rare chronic carrier may shed bacteria for up to 6 months.

Control: EXCLUDE all patients that have or are suspected to have diphtheria. Identify close contacts of a person diagnosed with diphtheria. Persons who have been exposed to diphtheria must seek medical attention immediately. Close contacts, regardless of immunization status, should be cultured for diphtheria and are often given antibiotic treatment to prevent illness. Close contacts should be given a diphtheria booster appropriate for age.

Other Information

All children attending Utah schools and licensed child care facilities are required <u>by law</u> to be immunized at the age of 2 months, 4 months, 6 months, 15-18 months, and 4-6 years. Diphtheria is a life-threatening but vaccine-preventable disease.

Infection can occur in immunized and partially immunized persons, as well as those who aren't immunized. The disease occurs more frequently and has more severe symptoms in unimmunized persons.

*Report the number of diagnosed cases to your local health department. Also report any pattern of illness which is unusual or an increased number of illnesses/cases.

(otitis media)

Incubation, Signs and Symptoms

Incubation Period: Varies depending upon the causative agent, usually secondary to an upper respiratory infection.

Signs and Symptoms: Inflammation of the middle ear with fluid in the middle ear. May be accompanied by fever, pain, impaired hearing, diarrhea, nausea, vomiting, or irritability. Occurs most frequently in children under 3 years. Generally accompanies or comes after an upper respiratory infection.

Methods of Transmission

Direct contact with respiratory secretions or droplets from an infected person. Indirectly from articles contaminated with respiratory secretions from an infected person.

Minimum Control Measures

Communicable Period: Varies depending upon the causative agent.

Control: **EXCLUDE** the child who has fever or feels unwell. Child may return after 24 hours of antibiotic therapy prescribed by a physician, or when symptoms subside.

Other Information

Ear infections are usually secondary to an upper respiratory tract infection.

Preventive measures include:

- 1) teaching children to turn and cough into their shoulders or cover their mouths with a tissue
- 2) using tissues one time only with prompt disposal;
- 3) discouraging mouthing behaviors;
- 4) proper ventilation;
- 5) separating children during nap times; and
- 6) proper handwashing.

FIFTH DISEASE (parvovirus B19, erythema infectiosum)

Incubation, Signs and Symptoms

Incubation Period: 4-14 days but can be as long as 20days. Rash and joint symptoms occur 2-3 weeks after infection.

Signs and Symptoms: Marked redness of cheeks ("slapped-face" appearance) that is often followed by a red, lace-like rash on the trunk and body. The rash can fluctuate in intensity and recur with exposure to sunlight or changes in the environmental temperature for weeks to months, although not all infected persons have a rash. Child may have a slight fever or feel unwell.

It is estimated that about 50% of adults have had previous infection and are immune. In adults the rash is often absent, but arthritis lasting for days to months may occur. In 25% of infected adults, the person is asymptomatic (without any symptoms). Immunodeficient persons with infection may experience chronic anemia.

Methods of Transmission

Primarily from direct contact, droplet, or airborne spread of respiratory secretions. Rarely by transfusion of blood or blood products. Vertically, from mother to fetus.

Minimum Control Measures

Communicable Period: The exact period is unknown, but children are thought to be most infectious before the rash breaks out; the disease is not communicable after the rash appears. Persons with aplastic crises (absence of normal cell development) are communicable up to one week after the onset of symptoms. Immunosuppressed patients may be infectious for months to years.

Control: **EXCLUDE the child who has a fever or feels unwell.** Otherwise, exclusion is not generally practical. Proper handwashing and disposal of tissues can help to lessen transmission

Other Information

In people with chronic red blood cell disorders, such as sickle-cell disease, infection may result in severe anemia. Infection has also been associated with arthritis in adults.

Some pregnant women have miscarried after becoming infected with parvovirus B19. However, the risk for this occurring is relatively low. Pregnant women who subsequently find that they have been in contact with children during the incubation period (4-20 days before signs or symptoms) may want to follow up with their physicians to discuss the option of serological testing to determine their immune status. Although women who work primarily with children are at increased risk of infection, a routine policy to exclude pregnant women from the workplace when parvovirus B19 is occurring is not recommended. Occupational settings are not the only place where transmission may occur. Prevention methods to avoid infection include proper handwashing, teaching children to cover their mouth when coughing, and disposal of tissues for respiratory secretions.

GIARDIASIS*

(Giardia enteritis, lambliasis)

Incubation, Signs, Symptoms

Incubation Period: 5-25 days or longer, usually 7-10 days.

Signs and Symptoms: Symptoms can include diarrhea, gas, cramps, bloating, weight loss, fatigue and loose and "greasy" stools. Many people infected with the Giardia parasite show no symptoms.

Methods of Transmission

In daycare centers and schools most infections are spread by person-to-person contact via the fecal-oral route (ingesting very tiny amounts of fecal material from an infected person through contaminated hands or objects). In day care centers, the disease is less often transmitted through contaminated water or food. Drinking untreated water, such as drinking from rivers or streams, is a major source of infection. *Giardia* organisms in dogs, beavers and other animals are infectious for humans and can contaminate water.

Often, an asymptomatic person spreads the infection by not properly washing hands after bowel movements or after changing diapers.

Minimum Control Measures

Communicable Period: Entire period of infection.

Control: Always EXCLUDE child and staff with diarrhea. Children and staff must thoroughly wash hands after toilet use and diaper changes. Hands should be washed before meals and snacks. Monitor handwashing practices among children. Educate staff regarding fecal-oral route of transmission.

Staff that change diapers must not prepare food. Separate diapered and toilet-trained children.

Wash and disinfect toys on a regular basis, particularly toys that have or could be put into children's mouths.

Children who are not toilet trained should not use wading pools. Alternative forms of recreational water play, such as running through sprinklers, prevent giardiasis from spreading.

Other Information

*Report this illness to your local health department. Also report any pattern of illness which is unusual or an increased number of illnesses/cases.

HAND, FOOT, AND MOUTH DISEASE

(enteroviral vesicular stomatitis with exanthem)

Incubation, Signs and Symptoms

Incubation Period: 3-5 days.

Signs and Symptoms: Small painful blisters in the mouth, on the gums and tongue. Blisters may also occur on the palms, fingers and soles of the feet. Usually the blisters persist from 7-10 days. A person with hand, foot, and mouth disease may be asymptomatic (with no symptoms).

Methods of Transmission

Direct contact with nose and throat discharges, respiratory droplets, or feces from an infected person.

Minimum Control Measures

Communicable Period: During the illness and perhaps longer because this virus persists in the stool for several weeks.

Control: **EXCLUDE** the child who feels unwell or has a fever. Wash hands thoroughly after toilet use, diaper changes, and nose blowing. Discard used tissues in the proper place. Use tissues only once.

HEAD LICE (pediculosis)

Incubation, Signs and Symptoms

Incubation Period: The nits (eggs) of lice may hatch in 1 week. Sexual maturity is reached approximately 8-10 days after hatching.

Signs and Symptoms: Infestation of the head and hairy parts of the body with adult lice, larvae and nits. This results in itching and irritation of the scalp and skin. Female lice are generally the size of a sesame seed. Eggs or nits are tiny tan or pearl-gray specks that attach to the hair shaft close to the scalp.

Methods of Transmission

Almost exclusively by contact with an infested person. Transmission can occur from sharing hats, combs and brushes, or by other articles recently in contact with the head of an infested person. Lice DO NOT jump or fly. Hair length does not influence infestation.

Minimum Control Measures

Communicable Period: From time of infestation until after completion of initial treatment.

Control: EXCLUDE from attendance until after first treatment with a medicated product, such as pyrethrin (Rid® and others). Parents of affected children should be notified and informed that their child must be properly treated before returning to school on the day after treatment.

Person *must* be retreated in 7-10 days in order to kill remaining nits. Follow the manufacturer's directions carefully. Remove the nits by using a fine-tooth comb. The nits can be loosened before combing by applying a damp towel to the scalp for 30 to 60 minutes, or by soaking the hair with white vinegar followed by applying a damp towel to the scalp for 30 to 60 minutes. Commercial rinses containing 8% formic acid may also be used to loosen the nits. All products must be used according to the manufacturer's directions.

Lice cannot live away from the host for more than 48 hours. Eggs do not survive away from the scalp for more than 7 days.

Thoroughly vacuum the environment including furniture. Insecticide sprays have not been proven useful. Laundering washable items in hot water and/or using the hottest drying cycle will destroy lice and nits. Non-washable items, such as stuffed toys, may be dry cleaned or placed in tightly sealed plastic bags for 10 days in order to destroy nits. Soak combs and brushes in hot water for 10 minutes or wash with pediculicide shampoo.

Other Information

Lindane-containing compounds (Kwell) should not be used on infants or small children or by women who are pregnant or nursing. The local health department should be notified of <u>outbreaks</u> of lice. When a child is found with head lice, all contacts and family members of the child should be examined carefully. Those infested should be treated.

HEPATITIS A*

Incubation, Signs and Symptoms

Incubation Period: 15-50 days; normally 25-30 days.

Signs and Symptoms: Preschool-aged children infected with the hepatitis A virus are usually asymptomatic (with few or no symptoms). Cases occurring in a day care center are often not recognized until a family member suddenly develops symptoms. Symptoms may include: fever, malaise (aches), lack of appetite, abdominal discomfort with nausea and vomiting, fatigue, teacolored urine, and onset of jaundice (yellowing of the skin and/or whites of the eyes). Infected children sometimes have abdominal discomfort, a general feeling of being unwell, lack of appetite and/or jaundice.

Methods of Transmission

Person-to-person contact by the fecal-oral route (ingestion of tiny amounts of fecal particles from contaminated objects or hands). The virus is excreted in the infected person's feces for 1-3 weeks before onset of symptoms. Peak levels of the virus are excreted 1-2 weeks before symptoms appear. Maximum infectivity occurs during the latter half of the incubation period and continues until a few days after the symptom of jaundice.

Outbreaks have occurred from infected food handlers and from eating raw or undercooked shellfish from sewage- or fecal-contaminated waters. Hepatitis A is more frequently spread in day care centers or other settings where diapered children attend. Risk of transmission is lower in the school setting, generally, because children are toilet trained.

Minimum Control Measures

Communicable Period: Most communicable for 1-2 weeks prior to the onset of symptoms. Diminishes after the onset of symptoms.

Control: EXCLUDE from attendance until the fever is gone and at least 1 week after the onset of illness. The ill person should be under a physician's care. Prompt administration of immune globulin (IG) to contacts helps prevent the spread of hepatitis A. Education of staff and children about good hygiene measures, including frequent hand washing, is essential for the control of hepatitis A.

There is a vaccine for prevention of the hepatitis A virus. However, the vaccine is not recommended as part of routine childhood immunizations. Contact your local health department or your family physician for more information on the hepatitis A vaccine.

Other Information

Contact the local health department for help in controlling the disease and for immune globulin (IG) recommendations. Hand washing for *all* persons is vitally important to prevent acquiring or transmitting hepatitis A. Persons caring for diapered children are at increased risk for acquiring the disease. They must exercise caution by practicing good hand washing techniques. The diaper changing area should be cleaned and disinfected after each use, not just during a disease outbreak. *Hepatitis A should be reported to your local health department.

HEPATITIS B*

Incubation, Signs and Symptoms

Incubation Period: As long as 45-160 days; averages 90 days.

Signs and symptoms: The disease is usually mild in children. Symptoms develop slowly and may include loss of appetite, stomach pain, nausea and vomiting. Sometimes skin rashes, joint pains, fever and jaundice (yellowing of the skin and whites of the eyes) develop.

Methods of Transmission

Hepatitis B may be spread by the following ways: 1) through sexual activity, 2) by direct contact with infected blood and body fluids, 3) an infected mother may transmit the virus to her baby during birth (in utero transmission is rare, accounting for only <2% of perinatal infections) and 4) by using contaminated sharps or needles. It is unlikely, but hepatitis B <u>can</u> be transmitted by biting (through saliva) if skin is broken. It is not transmitted by the fecal-oral route.

Minimum Control Measures

Communicable period: An infected person can spread the virus for several weeks before symptoms appear and as long as the person is ill. Persons who develop lifelong infections ("carriers"), may spread the virus for their entire lives.

Control: A child infected with hepatitis B should be under the care of a physician. Although the infected child does not need to be excluded for the entire period of the infection, a physician's referral is needed for the child to return to day care. If a child is unusually ill or exhibiting aggressive behaviors such as biting then exclusion may be necessary. Children who are chronic carriers do not need to be excluded as long as they do not display unusually aggressive behaviors (biting) that may place other children at risk. It is recommended for all household contacts of a hepatitis B case to be immunized.

Hepatitis B is a vaccine-preventable disease. Vaccination is recommended for all infants.

Other Information

Use barrier methods such as gloves to prevent contact with body fluids. For further information, see "Body Substance Precautions" on page 47. There is no specific treatment for infection with the hepatitis B virus so prevention is extremely important.

*Report this illness to your local health department. Also report any pattern of illness which is unusual or an increased number of illnesses/cases. For more information contact your local health department.

Hepatitis C*

Incubation, Signs, and Symptoms

Incubation Period: Average is 6 to 9 weeks with a range of 2 weeks to 6 months.

Signs and Symptoms: The signs and symptoms of hepatitis C virus infection are normally not distinguishable from those of hepatitis A or B. Symptoms in a new infection tend to mild and most infected children do not have symptoms. If symptoms are present they usually develop slowly and include loss of appetite, stomach pain, nausea, and vomiting. Jaundice (yellowing of the skin and whites of the eyes) only occurs in 25% of patients. Most children with long term Hepatitis C infection do not have symptoms. Individuals that do not have symptoms can spread the disease.

Methods of Transmission

Hepatitis C may be spread by the following ways: 1) through sexual activity(only 10% of hepatitis C infections are transmitted through sexual activity), 2) by direct contact with infected blood and body fluids, 3) an infected mother may transmit the virus to her baby during birth (in utero transmission is rare, accounting for only 5% of perinatal infections) and 4) by using contaminated sharps or needles. Approximately 40% of the hepatitis C infections have no known exposure. It is unlikely, but hepatitis C may be transmitted by biting if skin is broken. It is not transmitted by the fecal-oral route.

Minimum Control Measures

Communicable Period: An infected person can spread the virus for several weeks before symptoms appear. Persons who develop lifelong infections ("carriers"), may spread the virus for their entire lives.

Control: A child infected with hepatitis C should be under the care of a physician. Although the infected child does not need to be excluded for the entire period of the infection, if a child is unusually ill or exhibiting aggressive behaviors such as biting then exclusion may be necessary. Children who are chronic carriers do not need to be excluded as long as they do not display unusually aggressive behaviors (biting) that may place other children at risk.

There is <u>not</u> a vaccine available for hepatitis C.

Other Information

Use barrier methods such as gloves to prevent contact with blood and other body fluids. For further information, see "Body Substance Precautions" on page 47.

*Report this illness to your local health department. Also report any pattern of illness which is unusual or an increased number of illnesses/cases. For more information contact your local health department.

HERPES SIMPLEX VIRUS (HSV)

Incubation, Signs and Symptoms

Incubation Period: 2-14 days.

Signs and Symptoms: Herpes is caused by one of two viruses: herpes simplex type 1 (HSV1) and herpes simplex type 2 (HSV2). Herpes is a common infection that causes "cold sores" or "fever blisters"on the mouth or face (known as oral herpes or HSV1) and similar symptoms in the genital region (known as genital herpes or HSV2). Primary infection is usually without symptoms when it occurs in early childhood. In newborns, congenital infection produces a spectrum of diseases ranging from localized skin lesions to severe symptoms involving the whole body.

Methods of Transmission

Herpes is transmitted by direct skin-to-skin contact, directly from the site of infection to the site of contact. For example, if you have a cold sore and kiss someone, the virus can infect the other person's mouth. Herpes can also be spread sexually when there are no visible signs or symptoms. Both types may be transmitted to various sites by oral-genital, oral-anal, or anal-genital contact.

Minimum Control Measures

Communicable Period: The virus can be present for weeks and is most communicable when lesions are blister-like. The infected person may shed the virus when asymptomatic (without any symptoms) for both types of the virus.

Control: Excluding a child with HSV is not appropriate. HSV is very prevalent in the community. The oral type of Herpes (HSV1) may commonly be transmitted in families. If a child is symptomatic, exclusion may only be necessary if the child feels very uncomfortable. Care should be taken to disinfect objects placed in children's mouths before they are used by other children in the center. Good hand washing practices are essential when children or staff are infected with HSV.

If the child has gingivostomatitis (open blisters on gums and inside of the mouth) and cannot control oral secretions or has biting behaviors, the child should be EXCLUDED until the condition is resolved.

Other Information

Caregivers with HSV lesions should take special care with hygiene measures, such as handwashing. The person with HSV lesions should not kiss children/infants.

Any person suspecting child abuse or neglect, including sexual or physical abuse, must report it to the Child Abuse Hotline. In the Salt Lake area call 538-4377. In other areas of Utah call 1 (800) 678-9399. A confidential investigation will be conducted to ensure that the child is not endangered. Information must be handled in strictest confidence in order to safeguard the privacy of the individual.

HUMAN IMMUNODEFICIENCY VIRUS* ACQUIRED IMMUNODEFICIENCY SYNDROME HIV/AIDS

Incubation, Signs and Symptoms

Incubation Period: Window period of 6-12 weeks, an infected person will usually test negative during this time. The latency period includes the window period and can last 7-12 years. Generally, a person will test positive after the first 6-12 weeks; symptoms may not appear for 7-12 years.

Signs and Symptoms: HIV disease starts with infection by the human immunodeficiency virus (HIV). The virus attacks and suppresses the immune system so that opportunistic infections and cancers can affect the body. During the latency period a person may show no identifiable signs or symptoms. Some general symptoms of HIV disease may include prolonged fever, night sweats, persistent swollen lymph nodes, chronic diarrhea, and unexplained weight loss.

Methods of Transmission

HIV is transmitted in three ways: 1) through sexual intercourse with an infected person; 2) through contact with infected blood or body fluids to a mucous membrane or open or broken skin; and 3) from an infected mother to her child through pregnancy, birth or breast-feeding. Articles contaminated with blood or infected body fluids may also transmit HIV; for example, sharing needles. The major body fluids that are implicated in the transmission of HIV are blood (or any body fluid contaminated with blood), semen, and vaginal/cervical secretions. HIV cannot be transmitted through tears, saliva, urine or feces. However, it is important to use barrier precautions such as gloves for all body fluids because other diseases may be transmitted by these fluids.

Minimum Control Measures

Communicable Period: From the moment a person is infected, he or she becomes infectious for life and can transmit the virus to others.

Control: Children with HIV infection should not be excluded from school for the protection of other children or personnel, and disclosure of infection should not be required. Use barrier methods such as gloves to avoid contact with blood or body fluids. Wear disposable gloves when taking care of injuries. Wash hands thoroughly after removing the gloves.

Other Information

HIV is primarily a sexually transmitted disease. However, there are individuals who have been infected in other ways; such as through occupational exposure, I.V. drug use, or through birth to an infected mother. Infectious fluids can enter the body through chapped, broken or non-intact skin, needlesticks, or splashes to the mucous membranes of the eyes, nose or mouth. **It is essential to follow Body Substance Precautions at all times**. This means utilizing barrier methods, such as gloves, if contact with <u>any</u> body fluid is anticipated.

*Report this illness to your local health department. Also report any pattern of illness which is unusual or an increased number of illnesses/cases. For more information contact your local health department.

IMPETIGO

Incubation, Signs and Symptoms

Incubation Period: 1-10 days, occasionally longer or indefinite.

Signs and Symptoms: Blister-like lesions on the skin which later ooze and develop into crusted sores. They appear in an irregular pattern. The sores may spread into a red, oozy rash that gets a clear or honey-colored crust. Itching is common.

Methods of Transmission

Direct contact with draining sores. Contaminated hands are the most frequent method for spreading infection. Often, tiny breaks in the skin allow bacteria in to cause infection. Some people carry the bacteria and can easily infect others when the skin is broken. Impetigo can be caused by staphylococcal or streptococcal bacteria.

Minimum Control Measures

Communicable Period: As long as sores continue to weep or drain.

Control: EXCLUDE from attendance until 24 hours after antibiotic treatment has been started, until sores are dried, or until sores can be covered with a bandage.

Other Information

Early detection and adequate treatment are important in preventing spread. Medical treatment is necessary. Oral antibiotics are preferred treatment for multiple lesions. Any person with lesions should avoid contact with newborn babies. The infected individual should use separate disposable towels and washcloths. Place dressings in a disposable bag and immediately put in the garbage. Staphylococcal infections are reportable to the local health department by number only.

INFLUENZA* (flu)

Incubation, Signs and Symptoms

Incubation Period: Usually 1-5 days.

Signs and Symptoms: Sudden onset of an acute viral disease with symptoms of fever, chills, headache, sore muscles, and a general feeling of being unwell. Associated with runny nose, sore throat, and cough. Cough is often severe and lasts longer than other symptoms which generally subside in 2-7 days. Nausea, vomiting and diarrhea may occur in children.

Methods of Transmission

Direct contact with respiratory secretions or droplets from an infected person. Indirect contact with articles freshly soiled by discharges from an infected person. The virus is excreted in discharges from the nose and throat and can live in dried mucus for several hours.

Minimum Control Measures

Communicable Period: Probably 3-5 days after onset of symptoms; can be up to 7 days after the onset of symptoms in younger children.

Control: EXCLUDE child who has fever or feels unwell. Otherwise, exclusion is not generally practical. Antiviral medications, if given within 2 days of illness onset to otherwise healthy individuals, can reduce the duration of uncomplicated influenza illness.

Influenza is generally more severe in very young children who have had no prior exposure. Influenza can also be severe in elderly populations. Sometimes influenza resembles a cold or other respiratory virus.

Because young, otherwise healthy children are at increased risk for influenza-related hospitalizations, it is encouraged that healthy children aged 6-23 months receive influenza vaccination when feasible. It is also strongly recommended that children aged six months and greater with certain medical conditions receive influenza vaccination. Annual immunizations are effective in preventing infections. Physicians may prescribe antiviral medications for exposed individuals to reduce influenza transmission. Individuals exposed to influenza should consult with their physicians.

Other Information

Children must not be given aspirin or salicylate-containing compounds because administration of these products increases the risks of subsequent Reye syndrome. Acetaminophen may be used for fever control. Reye syndrome is a rare but life-threatening illness. Early signs and symptoms are vomiting and confusion. Medical care should be sought immediately if Reye syndrome is suspected.

*Report the number of diagnosed cases to your local health department. Also report any pattern of illness which is unusual or an increased number of illnesses/cases.

MEASLES*

(rubeola, hard measles, red measles)

Incubation, Signs and Symptoms

Incubation Period: 7-18 days from exposure to onset of fever, generally 10 days; about 14 days until rash appears.

Signs and Symptoms: The first symptoms of measles resemble a cold with cough, fever of 101F or greater, runny nose, and/or red, watery eyes. A red, blotchy rash follows a few days later around the ears and hairline and spreads to cover the face, spreading to the trunk and arms by the second day. The fever usually disappears 1 or 2 days after the rash. The rash turns from pink to reddish brown and lasts about 5 days. Peeling of the skin is common. The disease is more severe in infants and adults than in children.

Methods of Transmission

Direct contact with secretions of nose and throat from an infected person. Can be spread by airborne droplet or by articles freshly soiled with respiratory secretions from an infected person. Measles is a highly contagious disease, but can be prevented through proper immunization.

Minimum Control Measures

Communicable Period: 1-2 days before the onset of cold-like symptoms, 4-5 days before the onset of the rash to 4 days after the rash appears; measles is most infectious just before rash appears. Communicability is minimal after the second day of the rash.

Control: EXCLUDE from attendance for at least 4 days after the rash appears. During an outbreak, susceptible persons should be excluded from attendance until they are immunized or until two weeks after the rash onset of the last case of measles. Standard control measures for measles suggest that the measles vaccine will protect exposed persons in some cases if given within 72 hours of exposure. Immune globulin can be given to prevent or modify measles in a susceptible person within 6 days of exposure.

Other Information

All children attending Utah schools and licensed child care facilities are required <u>by law</u> to be immunized between the ages of 12-15 months and again between 4-6 years. Measles is a vaccine-preventable disease. Reimmunization is recommended for persons born after 1957 and vaccinated before 1970.

*Notify the local health department immediately if a case occurs in the center or school.

MENINGOCOCCAL INFECTIONS*

(bacterial meningitis, Neisseria meningitidis, Haemophilus influenzae)

Incubation, Signs and Symptoms

Incubation Period: Unknown; probably short, less than 4 days.

Signs and Symptoms: The symptoms appear suddenly with onset of fever, chills, intense headache, nausea, vomiting, stiff neck, and sometimes rash. Behavioral changes may occur, including irritability or sluggishness. The disease may progress to seizures and a coma. Meningococcemia, a blood infection, usually involves fever and a rash.

Signs and symptoms of meningitis are a **medical emergency**. Medical attention must be received immediately. Although anyone can get the disease, it appears most frequently in those less than five years of age. It is important to treat household and day care contacts as soon as possible with preventive drugs, preferably within 24 hours. Contact the local health department.

Methods of Transmission

Direct contact with droplets and secretions from the nose and throat of an infected person who might be asymptomatic (without symptoms).

Minimum Control Measures

Communicable Period: Patients are considered infectious for as long as the bacteria are present in the nose and throat and until 24 hours after antibiotics are started.

Control: EXCLUDE from attendance until adequately treated. May return to center when feels well enough after discharge from hospital and has received rifampin. Antibiotic therapy for contacts is indicated. *Haemophilus influenzae* type B is a vaccine-preventable disease. All children attending licensed child care facilities are required by law to get the Hib vaccination series. Children must be immunized at 2, 4, 6, and 12-15 months. The Hib vaccine is not required and is not recommended for children over 60 months (5 years).

Other Information

*Notify the health department immediately if a case occurs. Careful observation of exposed household, school or child care center contacts is essential. Exposed individuals who develop a fever should receive prompt medical evaluation. Household and close day care contacts need to receive antibiotics.

MUMPS*

Incubation, Signs and Symptoms

Incubation Period: 12-25 days, commonly 18 days.

Signs and Symptoms: Usually fever, often with headache, chills, and discomfort, usually followed by painful swelling or tenderness under the jaw or in front of the ear.

Methods of Transmission

By droplet spread or direct contact with saliva from an infected person. The virus is also found in urine.

Minimum Control Measures

Communicable Period: 7 days before onset of swelling and up to 9 days after swelling occurs. The virus is most communicable 2 days before the onset of swelling.

Control: EXCLUDE from attendance for at least 9 days after swelling first occurs or until swelling is gone.

Other Information

All children attending Utah schools or licensed child care facilities are required <u>by law</u> to receive mumps vaccine between the ages of 12-15 months and again between 4-6 years. Mumps is a vaccine-preventable disease.

The disease may have serious complications. Mumps infection during the first trimester of pregnancy may increase the rate of spontaneous abortion.

Adults born before 1957 are considered immune even if they did not have the disease or the vaccine as a child.

*Report the number of diagnosed cases to your local health department. Also report any pattern of illness which is unusual or an increased number of illnesses/cases.

PINK-EYE (conjunctivitis)

Incubation, Signs and Symptoms

Incubation Period: Viral: varies from 12 hours to 12 days. Bacterial: 1-3 days.

Signs and Symptoms: Redness of eye(s), watery, white or yellow discharge from the eye, matted eyelashes, burning or itching eyes.

Methods of Transmission

Contact with discharges from the eyes or upper respiratory tract of an infected person. Eyes can become infected from contaminated fingers, clothing and other articles, including shared towels or eye makeup.

Minimum Control Measures

Communicable Period: During the course of active infection.

Control: Isolate child with eye discharge. EXCLUDE the child from attendance until examined by a physician and the child is approved for readmission. For bacterial infections, this is normally 24 hours after treatment is started by the physician. Conjunctivitis caused by viruses is not shortened by antibiotic treatment and may be contagious until the watery, white or yellow discharge has ceased. Exclusion for long periods is often impractical.

Thorough handwashing and disinfection of contaminated articles will help to prevent spread. Eliminate shared articles, such as common towels. Do not share eye makeup or eye drops.

Other Information

Distinguishing between viral and bacterial conjunctivitis requires costly laboratory tests. Many physicians treat all cases with antibiotics in order to prevent serious complications.

Encourage children not to rub their eyes. Exclusion of the child with pink-eye and good handwashing practices help to prevent the spread in day care situations.

PINWORMS (enterobiasis)

Incubation, Signs and Symptoms

Incubation Period: 2-6 weeks.

Signs and Symptoms: Tiny parasitic worms that live in the lower intestine. Symptoms include anal itching with disturbed sleep, irritability, and local irritation due to scratching. The female worms resemble short white threads. They lay their microscopic eggs around the anus at night. Itching might be more intense at night. Pinworm infections are common in school-age children. Pinworms do not cause bed wetting or teeth grinding.

Methods of Transmission

Direct transfer of eggs from anus to mouth. Eggs may get on hands from articles contaminated with eggs of the parasite, such as clothing or bedding. Pinworms from animals cannot be transmitted to people.

Minimum Control Measures

Communicable Period: As long as the worms/eggs are present.

Control: The child should receive medical attention. Utah child care rules require EXCLUSION of the child until after the first treatment. Proper handwashing is necessary before eating and after toilet use. Reinfection is common. Thoroughly clean the bathroom and vacuum the house. Change bed linens and bath towels. Eggs survive less than 2 weeks outside of the host.

Other Information

Close contacts, such as siblings, should be checked and treated if necessary. Linens, clothing and bedding should not be shared and should be washed frequently. Pinworm infection may be present without symptoms.

Keep fingernails trimmed short. Discourage nail biting. Showers in the morning are preferred to baths.

Consult the local health department for help in controlling outbreaks of the disease within the center. Make sure children wash their hands after each toilet use and before meals.

RINGWORM OF THE SCALP, SKIN OR FEET

(dermatophytosis, tinea, athlete's foot)

Incubation, Signs and Symptoms

Incubation Period: Scalp: 10-14 days; Skin: 4-10 days; Feet: unknown.

Signs and Symptoms:

Scalp: Scaly patches of temporary baldness. Infected hairs are brittle and break easily. Occurs mainly between ages 2-10.

Skin: Reddish, flat, inflamed ringlike rash that may itch or burn. May be dry and scaly, moist, or crusted.

Feet: Scaling or cracking of the skin, especially between the toes, or blisters containing a thin, watery fluid. Itching is common. Unusual occurrence among younger children. Also called athlete's foot.

Methods of Transmission

Directly by contact with an infected person or animal. Indirectly by contact with articles and surfaces contaminated by such infected person or animal.

Minimum Control Measures

Communicable Period: As long as the rash or lesions are present, or the fungus persists on contaminated materials.

Control: EXCLUDE the child until medical treatment begins. Eliminate activities which involve skin to skin contact until fungus is completely gone. Refer people with a suspicious rash for a medical evaluation with diagnosis and treatment immediately.

Other Information

Preventive measures include not sharing personal items such as hair care articles and clothing. Personal hygiene is important--skin areas should be dried thoroughly after washing. All day care and household contacts, pets and farm animals should be inspected and treated if infected. Do not share brushes or combs with pets. Public facilities such as locker rooms and pools should not be used when infected with ringworm. Wash and disinfect bathroom surfaces and toys daily. Use disposable tissues and towels for wiping and washing children. Never use the same towel or tissue on more than one child.

Notify parents and staff if more than one person in the program develops ringworm for early detection of other cases.

ROSEOLA

(exanthem subitum)

Incubation, Signs and Symptoms

Incubation Period: About 10 days.

Signs and Symptoms: Sudden onset of a high fever, sometimes as high as 106 F that lasts 3-5 days and then quickly disappears. After fever subsides, a rash appears. The rash consists of small, separate rose-pink spots that begin on the chest and abdomen and usually last only 1-2 days. Most cases are in children 6 months to 3 years old.

Methods of Transmission

Unknown. Humans are the only known host.

Minimum Control Measures

Communicable Period: Unknown. Humans are the only known host.

Control: EXCLUDE a child with fever. A child with rash and no fever may return to day care.

Other Information

Usually occurs in children under 4 years of age, most commonly around age 2. Immunity follows illness. Caused by the human herpesvirus-6 (HHV-6) or a virus similar to HHV-6. Unrecognized infections can occur.

RUBELLA* (German measles)

Incubation, Signs and Symptoms

Incubation Period: 14-23 days, usually 16-18 days.

Signs and Symptoms: A skin rash lasting 1-3 days may or may not occur. If a rash occurs, it begins on the face. Mild fever, usually less than 101 F; can include cold symptoms such as runny nose, cough, etc. Lymph nodes at back of head, behind ear, and along back of neck often are enlarged. Young children may be asymptomatic (without symptoms).

Methods of Transmission

Direct contact from an infected person or indirectly by contact with articles freshly soiled by respiratory secretions from an infected person. The virus is excreted in discharges from nose, throat and urine.

Minimum Control Measures

Communicable Period: Communicable from 1 week before and at least 4 days after the onset of the rash.

Control: **EXCLUDE** the child from attendance for 7 days after the onset of rash. Infants born with congenital rubella syndrome should be evaluated before being admitted to the center as they may shed virus over a prolonged period after birth. Patients with congenital rubella in childcare should be considered contagious until they are at least one year old, unless nasopharyngeal and urine cultures are repeatedly negative for rubella virus.

Other Information

All children attending Utah schools and licensed child care facilities are required <u>by law</u> to be immunized between the ages of 12-15 months and again between 4-6 years. Rubella is a vaccine-preventable disease.

The disease, while mild in children, is very serious for unborn babies if it is contracted by a pregnant woman. Pregnant women, whether or not immunized, should immediately consult their physicians if they have been exposed to rubella.

*Report this illness to your local health department. Also report any pattern of illness which is unusual or an increased number of illnesses/cases.

SCABIES

Incubation, Signs and Symptoms

Incubation Period: 2-6 weeks before itching begins in a person with no previous exposure. Persons with prior exposure develop symptoms within 1-4 days.

Signs and Symptoms: Scabies is a skin infestation caused by microscopic parasites called mites. The mites burrow under the skin creating small raised areas of skin containing fluid or tiny paths under the skin. These burrows resemble wavy lines and appear frequently on finger webs or on the inside of the wrists and elbows. A rash may occur anywhere on the body, regardless of the area of infestation. Itching is intense, especially at night.

Methods of Transmission

Direct skin-to-skin contact with an infested person. Less commonly, transmission occurs through contact with contaminated clothing, bedding, or other articles.

Minimum Control Measures

Communicable Period: From the time of infestation until after mites and eggs are destroyed which ordinarily occurs after 1 or occasionally 2 courses of treatment 1 week apart. Generally, a person is treated on the first day. On the second day a bath or shower is taken and all linens, underclothes and bedding are changed. Carpets and furniture should be vacuumed. It should be noted that sometimes itching will persist for 1-2 weeks after treatment. This should not be taken as a sign that treatment failed. Overtreating should be avoided because the medication can be toxic. Follow the directions on the package exactly.

Control: Diagnosis of scabies should be confirmed by a physician. If a single case has been confirmed, EXCLUDE the child from attendance until the day <u>after</u> treatment is started. Individuals who have had direct contact with the infested child, including family members, should be evaluated and, if necessary, treated.

A child with rash and fever or a behavior change, such as itching, must be EXCLUDED from the day care setting.

Other Information

A single infestation in a family is uncommon. Bedding and clothing worn next to the skin during 72 hours prior to treatment should be laundered on the hot cycle. Store difficult to wash items in closed plastic bags for 5 days. Disinfection of the general environment is not necessary.

Consult the local health department for help in controlling outbreaks of this disease. Also report any pattern of illness which is unusual or an increased number or illnesses/cases.

SEXUALLY TRANSMITTED DISEASES*

(gonorrhea, syphilis, chlamydia)

Incubation, Signs and Symptoms

Incubation Period:

Gonorrhea: 2-7 days, sometimes longer. **Syphilis:** 10 days - 3 months, usually 3 weeks.

Chlamydia: 7-14 days or longer.

Signs and Symptoms:

Gonorrhea: In symptomatic males, a pus-colored discharge drains from the penis within an average period of 3-5 days. Although often asymptomatic in females, common symptoms may include burning, vaginal discharge and itching.

Syphilis: A tiny, painless ulcer develops at the site where the microorganism enters the body. A painless, firm lymph node commonly follows. Generalized secondary eruption occurs with mild symptoms including a rash, sore throat and weight loss.

Chlamydia: In males, symptoms include discharge, burning during urination and urethral itching. In females, discharge, itching and inflammation may occur in the genital tract and may result in permanent damage to the reproductive system. Asymptomatic infections may occur in both males and females.

Methods of Transmission

Gonorrhea: Direct contact with the discharge of mucous membranes of an infected person; almost always from sexual contact.

Syphilis: Direct contact with the secretions from the ulcers; almost always during sexual contact.

Chlamydia: Direct contact by sexual intercourse.

Minimum Control Measures

Communicable Period:

Gonorrhea: may extend for months in untreated individuals who might be asymptomatic; ends within hours of appropriate drug therapy.

Syphilis: variable and indefinite during primary and secondary stages. Adequate penicillin therapy ends communicability within 24-48 hours.

Chlamydia: unknown; thought to be until treatment is completed.

Control: There is no reason to exclude a child with a sexually transmitted disease.

Other Information

Any person suspecting child abuse or neglect, including sexual or physical abuse, must report it to the Child Abuse Hotline. In the Salt Lake area call 538-4377. In other areas of Utah call 1 (800) 678-9399. A confidential investigation will be conducted to ensure that the child is not endangered. Information must be handled in strictest confidence in order to safeguard the privacy of the individual.

*Report this illness to your local health department. Also report any pattern of illness which is unusual or an increased number of illnesses/cases.

SHIGELLOSIS* (bacillary dysentery)

Incubation, Signs and Symptoms

Incubation Period: 12-96 hours, usually 1-3 days.

Signs and Symptoms: Watery diarrhea with fever, nausea, vomiting, cramps and sometimes spasms of the rectum. Diarrhea may contain blood, mucus and pus. Mild or asymptomatic cases can occur.

Methods of Transmission

Directly or indirectly from a patient or carrier through the fecal-oral route. The disease spreads from an infected person who fails to properly wash hands after defecation and from contaminated hands, objects or foods. Ingestion of a few organisms may result in an infection.

Minimum Control Measures

Communicable Period: Variable; as long as the organism is excreted in the stool, normally 4 weeks after illness. Asymptomatic carriers may transmit infection. Rarely, the carrier state may persist for months.

Control: **EXCLUDE children and staff with diarrhea**. Proper handwashing after using the bathroom or changing diapers is necessary. Persons preparing food must not change diapered children in day care setting.

Other Information

All persons in high risk occupations (day care, patient care or food handling) should be excluded until 2 <u>negative</u> stool cultures are taken 24 hours or more apart. Samples must be taken 48 hours following the last dose of antibiotic therapy.

*Report this illness to your local health department. Also, report any pattern of illness which is unusual or in increased numbers.

SORE THROAT OR TONSILLITIS

The most frequent causes of sore throats and tonsillitis are the same viruses that cause colds. Whether or not to exclude a child can be a difficult decision. A general guideline is to exclude if symptoms resemble those of a strep throat.

	Probably <i>not</i> Strep Throat	Possible Strep Throat
Fever	absent or mild	mild to high
Appearance	gereralized redness	pus spots on back of throat and tonsils
Onset	usually slow, accompanied by cold symptoms	usually rapid (within hours)
Exclusion	most children don't need to be excluded unless having a fever or feeling unwell	EXCLUDE until negative strep screen or on antibiotics for 24 hours

STREP THROAT AND SCARLET FEVER

Incubation, Signs and Symptoms

Incubation Period: 1-3 days, rarely longer.

Signs and Symptoms:

Strep Throat: Fever, sore and red throat, pus spots on the back of the throat, tender and swollen lymph nodes in the neck.

Scarlet Fever: Includes all symptoms that occur with strep throat, as well as strawberry tongue and rash on the skin and inside the mouth. High fever, nausea, and vomiting may occur. The rash on the skin is normally easily felt but not seen. The tongue is usually white before the appearance of the strawberry tongue.

Methods of Transmission

Direct or intimate contact with an infected person or carrier. Rarely, by contaminated objects or hands. Outbreaks of strep throat may follow ingestion of contaminated foods, such as milk, egg salad or deviled eggs.

Minimum Control Measures

Communicable Period: With antibiotic treatment, communicability is eliminated within 24 hours. Variable for untreated cases. Can spread through mild, unrecognized cases.

Control: **EXCLUDE** from attendance until 24 hours after antibiotic treatment is started. Cultures should be obtained from persons with symptoms who have had contact with the diagnosed individual.

Other Information

Medical attention is essential. Untreated children may develop severe complications, including rheumatic fever and glomerulonephritis (kidney disease).

Consult the local health department for help in controlling outbreaks of this disease. Also report any pattern of illness which is unusual or an increased number of illnesses/cases.

THRUSH

(candidiasis, yeast infection, moniliasis)

Incubation, Signs and Symptoms

Incubation Period: Variable, but 2-5 days in infants.

Signs and Symptoms: Infection of the skin, mouth, or tongue that appears as white spots which cannot be scraped off without causing bleeding. May also occur in folds of the skin in diapered areas and is a common cause of diaper rash.

Methods of Transmission

Direct contact with secretions or excretions of mouth, skin, vagina, or feces from patients or carriers. From mother to baby during birth. Infection may also happen as part of normal body function. The fungus is often part of normal body flora that sometimes becomes a symptomatic infection.

Minimum Control Measures

Communicable Period: Presumably for as long as lesions are present.

Control: It is not necessary to exclude the child from attendance. Meticulous handwashing and disinfection of contaminated articles (such as nipples, pacifiers, etc.) is necessary to prevent spread. Medication is usually needed to shorten duration of infection.

Other Information

Wet diapers facilitate the spread of candidiasis; keeping children in dry diapers is very important in prevention of the disease. Children should be thoroughly cleaned and dried before fresh diapers are applied. Persons who have been on extended antibiotic therapy or who are immunocompromised may be at increased risk.

VIRAL MENINGITIS* (aseptic meningitis)

Incubation, Signs and Symptoms

Incubation Period: 2-21 days, depending on causative agent.

Signs and Symptoms: Acute disease with sudden onset of fever, intense headache, nausea, vomiting, and stiff neck. Behavioral changes may occur, including irritability or sluggishness. A rash may or may not be present.

Methods of Transmission

Varies with causative agent. Enteroviruses, a common cause of viral meningitis, are transmitted by the fecal-oral route (ingesting very tiny amounts of fecal material from an infected person through contaminated hands or objects). May also spread by airborne droplets from respiratory secretions.

Minimum Control Measures

Communicable Period: Varies with specific infectious agent.

Control: A child with fever who feels unwell should be EXCLUDED from attendance. A child with viral meningitis should be under a physician's care.

Since the virus may be excreted in feces for several weeks, proper handwashing is essential before handling or eating foods, after using the bathroom, assisting a child in the bathroom, or changing a diaper.

Other Information

A medical evaluation is necessary to determine whether meningitis is viral or bacterial because the symptoms are essentially the same. Viral meningitis is a less serious disease than bacterial meningitis, except in young infants who may suffer severe consequences. **Medical care is necessary.**

*Report this illness to your local health department. Also report any pattern of illness which is unusual or an increased number of illnesses/cases.

WHOOPING COUGH* (pertussis)

Incubation, Signs and Symptoms

Incubation Period: 7-10 days commonly, rarely exceeds 14 days.

Signs and Symptoms: Begins with cold symptoms such as a runny nose and an irritating cough that gradually worsens into severe coughing attacks (paroxysms) within 1-2 weeks. Violent spells of coughing frequently end with vomiting. Some cases can be severe, resulting in pneumonia or neurological symptoms. Can last for 1-2 months or longer. Young infants and adults often do not have typical whoop. Mild cases are sometimes missed.

Methods of Transmission

Airborne droplet or direct contact with the respiratory secretions from an infected person.

Minimum Control Measures

Communicable Period: Highly communicable in early stage and up to 3 weeks after the onset of violent coughing. Antibiotics shorten communicable period to 5 days after treatment is started.

Control: EXCLUDE from attendance until 5 days after start of antibiotic therapy or until symptoms are no longer present. Exposure to children especially incompletely immunized children should be observed for respiratory tract symptoms for 20 days after last exposure. Symptomatic children with a cough should be excluded until they are evaluated by a physician. Those diagnosed as having pertussis should not return to school until five days after starting antibiotics. Chemoprophylaxis should be considered for adult staff with close or extensive contact. Adult staff members should also be observed for respiratory tract symptoms, be tested if symptoms develop, and start antibiotic therapy if cough develops within 20 days of exposure.

Other Information

Immunizations should begin at 2 months of age and be received again at 4 months, 6 months, 15-18 months and 4-6 years. Children attending schools and licensed child care facilities are required by law to be adequately immunized for their age. Pertussis is a vaccine-preventable disease.

Serious complications of pertussis include bronchopneumonia and occasionally neurological symptoms. Accelerated schedule for booster vaccines and antibiotic therapy may be recommended for exposed individuals.

*Report this illness to your local health department immediately by telephone. Also report any pattern of illness which is unusual or an increased number of illnesses/cases.

COMMUNICABLE DISEASE GUIDELINES FOR EXCLUSION OF CHILDREN FROM DAY CARE

A. A child caregiver shall not be required to exclude from care a child with minor illness unless one or more of the following conditions exists:

- 1. The child has a fever defined by the child's age as follows:
- a. Infants younger than 4 months of age: rectal temperature or temperature in the armpit equal to or greater than 101 F.
 - b. Children 4-24 months: rectal or oral temperature equal to or greater than 102 F.
 - c. Children older than 24 months: oral or rectal temperature equal to or greater than 102

F.

- 2. Diarrhea, defined as an increased number of stools compared to the child's normal pattern with increased stool water and/or decreased form.
 - 3. Vomiting illness with two or more episodes of vomiting in the previous 24 hours.
 - 4. Mouth sores associated with an inability of the child to control his/her saliva.
 - 5. Rash with fever or behavior change.
 - 6. Infected eyes with discharge, until 24 hours after treatment started by physician.
- 7. Infestation (e.g., scabies, head lice, pinworm), until after first treatment with a medicated product.
 - 8. Impetigo, until 24 hours after antibiotic treatment has been started.
 - 9. Strep throat, until 24 hours after antibiotic treatment has been started.
 - 10. Ringworm infection, until after medication started.
- 11. Chickenpox, until one week after the onset of rash, or until all lesions have dried and crusted.
- B. The caregiver shall contact the local health department or the Utah Department of Health, Office of Epidemiology for specific guidelines in the event of a sudden or extraordinary occurrence of serious communicable disease. Such serious communicable diseases include:
 - 1. Pertussis (whooping cough)
 - 2. Measles (rubeola, red measles, hard measles)
 - 3. Rubella (German measles)
 - 4. Mumps
 - 5. Meningitis (Hib, other)
 - 6. Hepatitis A
 - 7. Tuberculosis
 - 8. Gastroenteritis (giardiasis, shigellosis, E. coli, Campylobacter, other)
 - 9. Streptococcal infections (strep throat, scarlet fever, rheumatic fever)
 - 10. Food poisoning
 - 11. Influenza
 - 12. Hepatitis C
 - 13. Human Immunodeficiency Virus (HIV, AIDS)
 - 14. Poliomyelitis
 - 15. Diphtheria
 - 16. Hepatitis B

Adapted from "Child Care Center Rules," July 2003 Utah Department of Human Services, Office of Licensing

TEN STEPS TO PLAYGROUND SAFETY

- 1. Supervise children at all times. Leaving children alone at a playground encourages rough and reckless play that can lead to injury.
- 2. Check playground equipment every day. Broken equipment should be repaired immediately. Do not allow children to play on broken equipment. Sharp edges, loosely anchored climbing equipment and other hazards should be fixed quickly.
- 3. Excessive heights for equipment, such as monkey bars or slides, are unnecessary. A series of platforms in successive heights between 18 to 24 inches creates the appearance of a challenging climb and provides a limited fall.
- 4. A soft surface should be used for ground covering to absorb the impact of falls. Packed earth is <u>not</u> a good ground covering for playground equipment. Six to ten inches of mulch, dry sand, wood chips, bark, pea gravel, shredded tires, or synthetic mats provide a cushioning effect. This cushion prevents the severity of an injury due to a fall. Loosely filled material must be redistributed frequently, including after use, heavy rain, or freezing.
- 5. Traffic patterns must be established out of harms way. Ample clearance room is needed around swings, slides, and merry-go-rounds. Children must be able to enter and exit from equipment safely without having to dodge moving obstacles.
- 6. Restrict children from playing on equipment that is too big or small for them. Smaller children cannot play safely on oversized equipment.
- 7. Keep the playground well maintained. Pick up the trash. Keep weeds trimmed. Remove poisonous plants. Keep the surface graded so there is no standing water.
- 8. Separate areas for different types of play are needed. Too little space on a playground allows a child, intently focused on his/her own activity, to step right into the activity of another group.
- 9. Look at the area outside of the playground. Is there an environmental threat, such as a busy street, next to it? Separate nearby dangers with a fence.
- 10. Teach children how to travel to and from the playground safely. Seatbelt, traffic, and bicycle safety are important for children to learn correctly and use consistently. Learning at an early age helps children develop a lifetime of good habits.

Sources:		

Bowers, L. Follow these guidelines for better and safer playgrounds. The Executive Educator. 1989; 27-29, 37-39.

U.S. Consumer Product Safety Commission. A Handbook for Public Playground Safety, Vol. I, General Guidelines for Existing Playgrounds. 1991; 10-11.

ANIMAL BITES

- 1. Provide first aid to the child. Flush the wound with lots of water. Clean the wound with soap and water, then rinse it well. Refer to medical treatment opposite the entrance point of the stinger. by or under the direction of a physician.
- 2. Confine the animal if possible. Write down the name, phone number and address of the owner, a description of the animal, and the events surrounding the bite. If the animal escapes, it is particularly important to get as much information as 3. possible.
- 3. Report the bite to the local health department.

BEE STINGS

- The stinger should be removed 1. carefully by gently pushing on the skin Do not pull the stinger becaase it could break off inside the skin.
- Use a cold compress to relieve the pain.
- If after a bee sting, a child has hives, turns pale or weak, becomes nauseous or vomits, complains of a tightness in the chest or difficulty breathing, call for medical emergency services immediately.

Police or Sheriff: _	
Fire Department:	
Poison Control:	
Ambulance/Rescu	ıo.

The following phone numbers should be near each phone in the day care center:

GENERAL SANITATION GUIDELINES FOR DAY CARE CENTERS AND SCHOOLS

Cleaning and disinfecting surfaces is one of the most important ways to ensure that communicable diseases are not spread in your day care center or school. Proper cleaning reduces the number of germs or microorganisms available to cause illness or infection. In order for a disinfectant to work properly, a dirty surface should first be cleaned with a detergent and water solution, and then rinsed. Disinfectants will not work properly without first removing the gross contamination or soil.

Disinfectants must make a claim to disinfect on the bottle, be registered with the Environmental Protection Agency, and have an E.P.A. number listed on the label. An inexpensive disinfectant can be made by mixing 1/4 cup of household bleach and 1 gallon of water, or 1 tablespoon of bleach to 1 quart of water. Do not use this disinfectant on surfaces that may be damaged by bleach, such as carpets. It is important to read the label, mix solutions properly and use the product exactly as the manufacturer directs. Some products, such as regular bleach, can be mixed in different concentrations to make both disinfecting and sanitizing solutions. Sanitizing solutions are used on food contact surfaces and for dishes and utensils in the last compartment of the three-compartment sink. The sanitizing solution is mixed with smaller amounts of concentrate and more water. Follow the directions on the label and make sure to test the sanitizer strength with a litmus paper test kit.

Toys and Stuffed Animals

Toys: Clean and disinfect at least weekly. Toys should be washed daily for infants and toddlers because they often put toys in their mouths.

Stuffed Animals: Machine wash and dry on fluff cycle.

Blankets and Sheets

Center-owned: Machine wash and dry at least weekly, before being used by another child, and any time visibly soiled.

Child-owned: the same as center-owned. It is a good idea to send blankets home each weekend to be washed.

Bathrooms, Floors and Other Surfaces

Bathrooms: Disinfect sinks, counters and commode handles in the morning and afternoon. Clean toilets nightly.

Floors: Sweep and disinfect nightly.

Tables: When needed and nightly.

Cleaning a Blood or Body Fluid Spill

Wear gloves. Never touch the fluid with bare hands. Wipe up the spill with disposable towels. Place used towels in a plastic garbage liner. Use soap and water to clean the surface, rinse with clear water and disinfect with a bleach solution (described above). Soak the mop in a bleach and water solution. Remove gloves and dispose in the liner, tie shut and dispose of the bag.

FOOD SAFETY IN THE DAY CARE SETTING

Store potentially hazardous foods cold at 45F or below and hot at 140F or above. Essentially, keep hot foods hot, cold foods cold or do not keep them. Bacteria can grow if food is kept at temperatures not hot enough or not cold enough. These bacteria can sometimes cause illness if the food is eaten. Use coolers with ice packs for keeping lunches on field trips. Make sure that the refrigerator has a thermometer so that you can check the temperature. Children who pack lunch from home should keep their lunches in the refrigerator.

Thaw food correctly. Leaving food out on the kitchen counter to thaw can allow bacteria to grow in the food, which could cause a foodborne illness. Thaw foods in one of the following ways: 1) on a tray on the bottom shelf of the refrigerator, 2) under cold running and continuously draining water, 3) in the microwave only if the food is cooked immediately afterwards.

Wash your hands before food handling, eating and after using the bathroom. Teach the children to wash their hands. Many diseases and infections are prevented by good handwashing practices.

Wash, clear water rinse and then sanitize dishes and utensils in the three compartment sink. Never mix bleach or sanitizer with dishwashing soap. The three compartment sink is designed for washing, clear water rinse and then a sanitizing rinse. Measure out the correct amount of sanitizer. Use a litmus test kit to test the concentration. Sanitize for the proper amount of time and then let dishes and utensils air-dry.

Keep food products away from cleaners and medicine. Never refer to medicine as candy to a child. This only encourages children to eat more medicine than they should. Separate the cleaners from the food. Some detergents can be mistaken for foods, oxalic acid appears like sugar. Pine cleaners may look like apple juice. Medicine may look like candy. Label all spray bottles and bulk containers.

BODY SUBSTANCE PRECAUTIONS FACT SHEET

What are Body Substance Precautions?

Body Substance Precautions refer to the consistent use of barrier methods to prevent direct contact with the body fluids of another person. Gloves are worn to prevent contact with non-intact skin, moist mucous membranes, and body fluids; masks and eye protection are worn when there is a chance of splashing body fluids into the eyes, nose or mouth; gowns are worn if there is a chance that clothing may become soiled with body fluids. Body Substance Precautions also include proper disposal of contaminated equipment and good handwashing practices.

Why should I use Body Substance Precautions?

Blood and body fluids often contain microorganisms that can cause illness. In order for an illness or communicable disease to occur, the microorganism must be transmitted from the reservoir (blood or body fluid) to a susceptible host. The use of barrier methods such as gloves, as well as good handwashing practices, helps to prevent the transmission of a pathogen into a susceptible host and minimizes the chance that disease or infection will occur.

How does Body Substance Precautions Work?

Body Substance Precautions require that appropriate barrier methods be used to avoid contact with body fluids, secretions, excretions and broken skin. The "barriers" such as gloves, gowns and masks must be put on <u>before</u> beginning the task where exposure could occur. For example, if someone vomits and the area must be cleaned and disinfected, begin the task by putting on latex or vinyl gloves. After finishing, remove the gloves and place in the proper trash receptacle. Finally, wash your hands with warm water and soap.

Why should I use Body Substance Precautions?

All blood and body fluids can contain microorganisms capable of causing disease or infection if introduced into a susceptible host. By using Body Substance Precautions, you protect yourself and your patient from exposure that might cause illness.

What is the difference between Universal Precautions and Body Substance Precautions?

Universal Precautions were developed by the Centers for Disease Control and Prevention to prevent bloodborne diseases such as infection with the human immunodeficiency and hepatitis B viruses. Body Substance Precautions require that barrier methods be used for <u>all body fluids</u> including those that contain bloodborne pathogens. This is because many diseases are not "bloodborne" and can be caused from exposure to other body secretions and excretions. Body Substance Precautions are based upon the idea that <u>all</u> body secretions and excretions could contain microorganisms capable of causing disease.

What is an example of Body Substance Precautions?

The hepatitis A virus is transmitted by ingesting minuscule amounts of feces from an infected person, generally through contaminated hands or foods (fecal-oral route). Using protective equipment such as gloves to change diapers prevents contact with feces. After removing the

gloves, good handwashing practices reduce the chance that the hepatitis A virus is on your hands. Body Substance Precautions (gloves and handwashing) help to eliminate the mode of transmission necessary to cause infection with the hepatitis A virus.

What body fluids are included in Body Substance Precautions?

All secretions and excretions of the body. This includes blood, saliva, sputum, feces, urine, open lesions, non-intact (broken) skin, secretions from wounds, vomitus, breast milk and all other fluids, secretions and excretions.

Do Body Substance Precautions just mean using protective equipment such as gloves?

No, Body Substance Precautions don't stop with protective equipment. They also include proper disposal of contaminated equipment and good handwashing practices. They include disposing of sharps in a rigid container and putting dirty linen in the proper receptacle. Body Substance Precautions also mean that disposable resuscitation devices should be used to perform cardio pulmonary resuscitation (C.P.R.).

What should I do if I get a body substance on my skin?

Wash the area immediately with soap and warm water. Flush the area with lots of water. If you were exposed in an occupational setting, follow your employer's exposure control plan and seek the appropriate medical attention. If the exposure was percutaneous such as a needlestick or involved non-intact skin, make sure that you seek medical attention as soon as possible. Remember that it is important to follow up on all non-intact skin exposures to blood and body fluids.

Where can I get more information?

From your doctor.

From your local health department. See contact list below.

From the Utah Department of Health, Office of Epidemiology at (801) 538-6191. To report a disease or outbreak call 1-888-EPI UTAH (374-8824) www.health.utah.gov

Center for Disease Control (CDC) www.cdc.gov

LOCAL HEALTH DEPARTMENTS

Bear River District Health Department

655 East 1300 North Logan, Utah 84321 Phone: (435) 752-3730

Central Utah Public Health Department

70 West View Drive Richfield, Utah 84701

Phone: (435) 896-5451 / 5452

Davis County Health Department

Courthouse Annex 50 East State Street P.O. Box 618 Farmington, Utah 84025-0618 Phone: (801) 451-3340

Salt Lake City/County Health Department

2001 South State Street, S-2500 Salt Lake City, Utah 84190-2150

Phone: (801) 468-2700

Southeastern Utah District Health Department

28 South 1st East P.O. Box 800 Price, Utah 84501 Phone: (435) 637-3671

Southwest Utah Public Health Department

168 North 100 East St. George, Utah 84770 (435) 673-3528

Summit City/County Health Department

85 North 50 East P.O. Box 128 Coalville, Utah 84017 Phone: (435) 336-3222

Tooele County Health Department

151 North Main Street Tooele, Utah 84074 Phone: (435) 843-2300

Tricounty Health Department

147 East Main Street Vernal, Utah 84078 Phone: (435) 781-5475

Utah County Health Department

589 South State Street Provo, Utah 84606 Phone: (801) 370-8700

Wasatch City/County Health Department

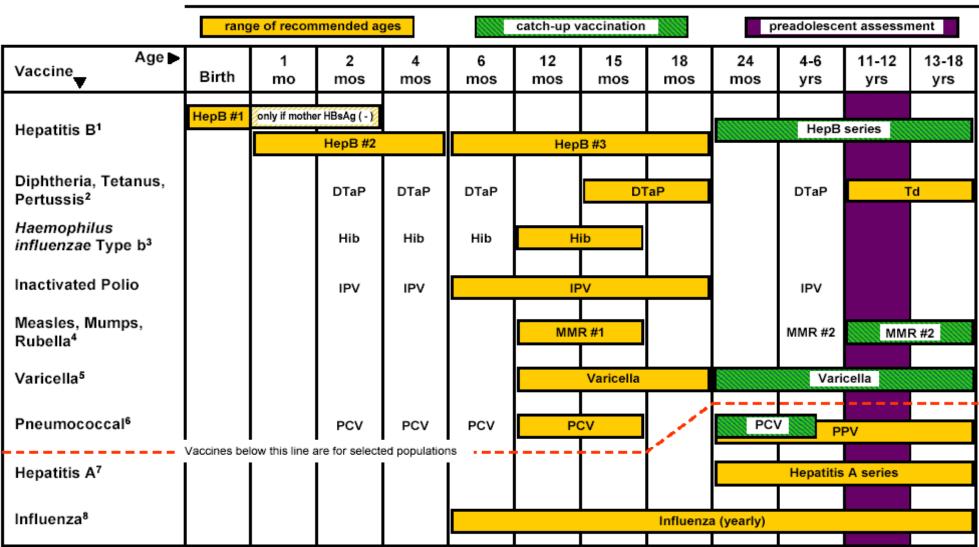
805 West 100 South P.O. Box 246 Heber City, Utah 84032 Phone: (435) 654-2700

Weber/Morgan District Health Department

2570 Grant Avenue Ogden, Utah 84401 Phone: (801) 399-8433

Dear Parent:	
When we were reviewing our immunization rec	cords, it came to our attention that your child might not be up to date on his/her
certain diseases unless a personal exemption	t is a requirement that children be immunized for is obtained from the local health department. By perly immunized, we are protecting the health of
Sincerely,	
Teacher's Signature	Date

Recommended Childhood and Adolescent Immunization Schedule— United States, 2003



This schedule indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of December 1, 2002, for children through age 18 years. Any dose not given at the recommended age should be given at any subsequent visit when indicated and feasible. Indicates age groups that warrant special effort to administer those vaccines not previously given. Additional vaccines may be licensed and recommended during the year. Licensed combination vaccines may be used whenever any components of the combination are indicated and the vaccine's other components are not contraindicated. Providers should consult the manufacturers' package inserts for detailed recommendations.

Footnotes

Recommended Childhood and Adolescent Immunization Schedule— United States, 2003

1. Hepatitis B vaccine (HepB). All infants should receive the first dose of hepatitis B vaccine soon after birth and before hospital discharge; the first dose may also be given by age 2 months if the infant's mother is HBsAgnegative. Only monovalent HepB can be used for the birth dose. Monovalent or combination vaccine containing HepB may be used to complete the series. Four doses of vaccine may be administered when a birth dose is given. The second dose should be given at least 4 weeks after the first dose, except for combination vaccines which cannot be administered before age 6 weeks. The third dose should be given at least 16 weeks after the first dose and at least 8 weeks after the second dose. The last dose in the vaccination series (third or fourth dose) should not be administered before age 6 months.

Infants born to HBsAg-positive mothers should receive HepB and 0.5 mL Hepatitis B Immune Globulin (HBIG) within 12 hours of birth at separate sites. The second dose is recommended at age 1-2 months. The last dose in the vaccination series should not be administered before age 6 months. These infants should be tested for HBsAg and anti-HBs at 9-15 months of age.

Infants born to mothers whose HBsAq status is unknown should receive the first dose of the HepB series within 12 hours of birth. Maternal blood should be drawn as soon as possible to determine the mother's HBsAq status; if the HBsAq test is positive, the infant should receive HBIG as soon as possible (no later than age 1 week). The second dose is recommended at age 1-2 months. The last dose in the vaccination series should not be administered before age 6 months.

- 2. Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP). The fourth dose of DTaP may be administered as early as age 12 months, provided 6 months have elapsed since the third dose and the child is unlikely to return at age 15-18 months. Tetanus and diphtheria toxoids (Td) is recommended at age 11-12 years if at least 5 years have elapsed since the last dose of tetanus and diphtheria toxoid-containing vaccine. Subsequent routine Td boosters are recommended every 10 years.
- 3. Haemophilus influenzae type b (Hib) conjugate vaccine. Three Hib conjugate vaccines are licensed for infant use. If PRP-OMP (PedvaxHIB® or ComVax® [Merck]) is administered at ages 2 and 4 months, a dose at age 6 months is not required. DTaP/Hib combination products should not be used for primary immunization in infants at ages 2, 4 or 6 months, but can be used as boosters following any Hib vaccine.

- 4. Measles, mumps, and rubella vaccine (MMR). The second dose of MMR is recommended routinely at age 4-6 years but may be administered during any visit, provided at least 4 weeks have elapsed since the first dose and that both doses are administered beginning at or after age 12 months. Those who have not previously received the second dose should complete the schedule by the 11-12 year old visit.
- 5. Varicella vaccine. Varicella vaccine is recommended at any visit at or after age 12 months for susceptible children, i.e. those who lack a reliable history of chickenpox. Susceptible persons aged ≥13 years should receive two doses, given at least 4 weeks apart.
- 6. Pneumococcal vaccine. The heptavalent pneumococcal conjugate vaccine (PCV) is recommended for all children age 2-23 months. It is also recommended for certain children age 24-59 months. Pneumococcal polysaccharide vaccine (PPV) is recommended in addition to PCV for certain high-risk groups. See MMWR 2000;49(RR-9);1-38.
- 7. Hepatitis A vaccine. Hepatitis A vaccine is recommended for children and adolescents in selected states and regions, and for certain high-risk groups; consult your local public health authority. Children and adolescents in these states, regions, and high risk groups who have not been immunized against hepatitis A can begin the hepatitis A vaccination series during any visit. The two doses in the series should be administered at least 6 months apart. See MMWR 1999;48(RR-12);1-37.
- 8. Influenza vaccine. Influenza vaccine is recommended annually for children age ≥6 months with certain risk factors (including but not limited to asthma, cardiac disease, sickle cell disease, HIV, diabetes, and household members of persons in groups at high risk; see MMWR 2002;51(RR-3);1-31), and can be administered to all others wishing to obtain immunity. In addition, healthy children age 6-23 months are encouraged to receive influenza vaccine if feasible because children in this age group are at substantially increased risk for influenza-related hospitalizations. Children aged ≤12 years should receive vaccine in a dosage appropriate for their age (0.25 mL if age 6-35 months or 0.5 mL if aged ≥3 years). Children aged ≤8 years who are receiving influenza vaccine for the first time should receive two doses separated by at least 4 weeks.

For additional information about vaccines, including precautions and contraindications for immunization and vaccine shortages, please visit the National Immunization Program Website at www.cdc.gov/nip or call the National Immunization Information Hotline at 800-232-2522 (English) or 800-232-0233 (Spanish).